Installation and Operating Manual

GB

Network 1-Channel Video/Audio Server, MJPEG, H.264, Ethernet GLS-2301H

eneo®

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1. Safety Instructions / Maintenance

- Read these safety instructions and the operation manual first before you install and commission the unit.
- Keep the manual in a safe place for later reference.
- The system may only be commissioned and maintained by personnel authorized to do this and it must only be carried out in accordance with relevant standards and guidelines.
- Never cover the ventilation slots to avoid overheating.
- Never insert metal objects or any other items into the vents. This may permanently damage the unit.
- Protect your unit from contamination with water and humidity to prevent it from permanent damage.
  Never switch the unit on when it gets wet.
  Have it checked at an authorized service center in this case.
- Never operate the units outside of the specifications as this may prevent their functioning.
- Do not operate the unit beyond their specified temperature, humidity or power ratings. Operate the unit only at a temperature range of 0°C to +50°C and at a humidity of max. 80%.
- The unit should be protected against excessive heat, dust, damp and vibration.
- Do not place any heavy objects on the unit.
- To disconnect the power cord of the unit, pull it out by the plug. Never pull the cord itself.
- Pay attention when laying the connection cable and observe that the cable is not subject to heavy loads, kinks, or damage and no moisture can get in.
- Contact your local dealer in case of malfunction.
- The connection cable should only be changed by Videor E. Hartig GmbH.
- The warranty becomes void if repairs are undertaken by unauthorized persons. Do not open the housing.
- Installation, maintenance and repair have to be carried out only by authorized service centers.

  Before opening the cover disconnect the unit from mains input.
- Only use original parts and original accessories from Videor E. Hartig GmbH.
- Do not use strong or abrasive detergents when cleaning the dome. Use a dry cloth to clean the dome surface.
  In case the dirt is hard to remove, use a mild detergent and wipe gently.

NOTE: This is a class A digital device.
This digital device can cause harmful interference in a residential area; in this case the user may be required to take appropriate corrective action at his/her own expense.

Montage- und Betriebsanleitung
Installation and Operating Instructions
Mode d'emploi
Instrucciones de manejo

⟹ www.videor.com

2. Product Features

2.1 Product Introduction

This video server is an ideal user-friendly device which brings digital benefits to your analog surveillance cameras. The tiny and compact body design can be easily installed in all kinds of analog cameras for network surveillance.

The video server adapts Texas Instrument's (TI's) newest digital media processor - the Da Vinci DM 355 for efficient image operation, while also offering simultaneous dual-codec (H.264 / MJPEG) video compressions with the highest resolution, Full D1, at 30/25 frames per second in the NTSC/PAL systems, respectively. In addition, users based on different bandwidths can choose multi-profile MJPEG video streaming at different resolutions.

The video server provides stable, reliable and convenient network surveillance. It safely downloads automatic video Codec and other components, and lets you set up the control settings very easily. It provides UPnP features as well. Its USB interface is for basic network setting and updating. The SD card slot supports alarm and event recording and updating. Furthermore, this encoder board comes with the Power over Ethernet (PoE) function, and its RS-485 interface can be connected with all kinds of Pelco-D PTZ cameras.

We have launched this dual-codec video server for the more advanced digital surveillance solutions demanded by our clients. We believe this unit is the right answer to your Network surveillance problems. You will find it practical, precise and indispensable.

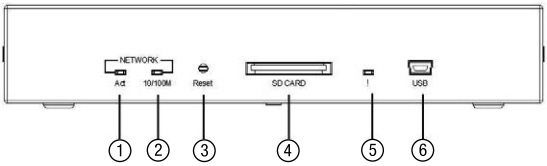
2.2 General Description

- 1-channel Video/Audio Server for LAN/WAN/Internet
- Simultaneous Video Streaming (H.264 & MJPEG)
- Image Frame Rate: up to 25 ips. (720x576 Px.)
- RS-485 Telemetry Control Interface
- Alarm Input/Outputs
- Motion Detection
- Integrated Web Server: 10Base-T/100Base-TX
- Viewer for Monitoring, Recording and Configuration
- Pre and Post Event Recording (in Client PC)
- SD Socket for Local Video Storage by SD Cards
- E-Mail Notification in Case of an Alarm
- Basic Setting via USB Interface and Network
- Power Input via Power over Ethernet and 12VDC/24VAC

FACTORY DEFAULT	• **IP Address:**	**192.168.1.168**
	• **Password:**	**9999**

3. Description of the Front/Rear View

3.1 Front Panel



1. Act indicator

Indicates the network status of the unit. The green light indicates the network is activating.

2. 10/100M indicator

The green light indicates the network data are transmitting.

3. Reset button

Recover to factory default.

4. SD CARD Slot

This is used for system software updating and archiving / accessing critical images

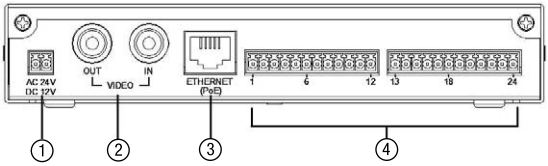
5. Status indicator

If this LED light is on, it means the SD card is recording or the device is updating.

6. 5pin MINI B Port

The user can use a USB device cable to connect the Video Server to the USB port on the PC.

3.2 Rear Panel



1. DC jack

The inlet connects to an external power supply. Connect with the 12 VDC/24VAC TUV-approved Power Supply; or connect with the UL Listed Class 2 Power Supply or ITE power supply marked 'LPS' or its equivalent.

2. Video in connector

The BNC connector is used to connect to the video output from the camera. 1 camera can be connected to the connector.

Video out connector

This BNC connector provides a video signal to the main monitor.

3. ETHERNET (PoE) Connector

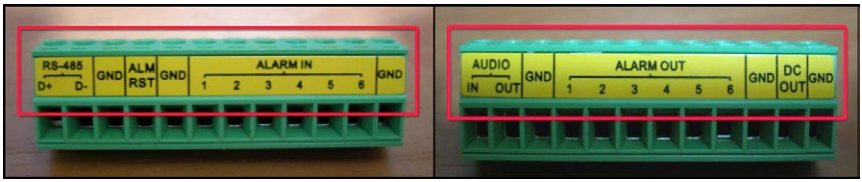
This is a standard RJ-45 connector for 10/100 Mbps Ethernet networks. PoE (Power over Ethernet) function: Provides power to the device via the same cable as used for the network connection.

NOTE: Please refer to the APPENDIX – PoE Installation Method for more details.

4. ALARM I/O

This is an 24-PIN connector including the alarm input x 6, alarm-out x6, GND x 6, RS-485+-(2 pins), audio input and audio output items for connecting with external devices.

3.3 ALARM I/O PIN Configuration



1. **RS-485 pin: D+**
2. **RS-485 pin: D–**
3. **GND1:** Ground Contact
4. **ALARM RESET (INPUT):** This pin connects to an alarm-clear device for clearing an alarm (5V / 0V(Active)).
5. **GND2:** Ground Contact
6. **ALARM IN 1 (INPUT):** This is an alarm input which can be programmed in the menu system to Normally Open or Normally Closed (5V / 0V(Active)).
7. **ALARM IN 2 (INPUT):** This is an alarm input which can be programmed in the menu system to Normally Open or Normally Closed (5V / 0V(Active)).
8. **ALARM IN 3 (INPUT):** This is an alarm input which can be programmed in the menu system to Normally Open or Normally Closed (5V / 0V(Active)).
9. **ALARM IN 4 (INPUT):** This is an alarm input which can be programmed in the menu system to Normally Open or Normally Closed (5V / 0V(Active)).
10. **ALARM IN 5 (INPUT):** This is an alarm input which can be programmed in the menu system to Normally Open or Normally Closed (5V / 0V(Active)).
11. **ALARM IN 6 (INPUT):** This is an alarm input which can be programmed in the menu system to Normally Open or Normally Closed (5V / 0V(Active)).
12. **GND3:** Ground Contact
13. **AUDIO IN Connector:** The connector is used to connect the audio output from a camera or other devices.
14. **AUDIO OUT Connector:** The connector provides the unit's audio signal to a speaker or stereo.
15. **GND4:** Ground Contact
16. **ALARM OUT 1 (OUTPUT):** This is an alarm-output trigger. Connect this to external devices such as buzzers or lights (5V / 0V(Active)).
17. **ALARM OUT 2 (OUTPUT):** This is an alarm-output trigger. Connect this to external devices such as buzzers or **lights** (5V / 0V(Active)).
18. **ALARM OUT 3 (OUTPUT):** This is an alarm-output trigger. Connect this to external devices such as buzzers or lights (5V / 0V(Active)).
19. **ALARM OUT 4 (OUTPUT):** This is an alarm-output trigger. Connect this to external devices such as buzzers or lights (5V / 0V(Active)).
20. **ALARM OUT 5 (OUTPUT):** This is an alarm-output trigger. Connect this to external devices such as buzzers or lights (5V / 0V(Active)).
21. **ALARM OUT 6 (OUTPUT):** This is an alarm-output trigger. Connect this to external devices such as buzzers or lights (5V / 0V(Active)).
22. **GND5:** Ground Contact
23. **DC-OUT:** DC-12V 350mA max.
24. **GND6:** Ground Contact

3.4 The USB Function

By connecting the video server board with a PC via the USB connector, the video server board can provide different functions.

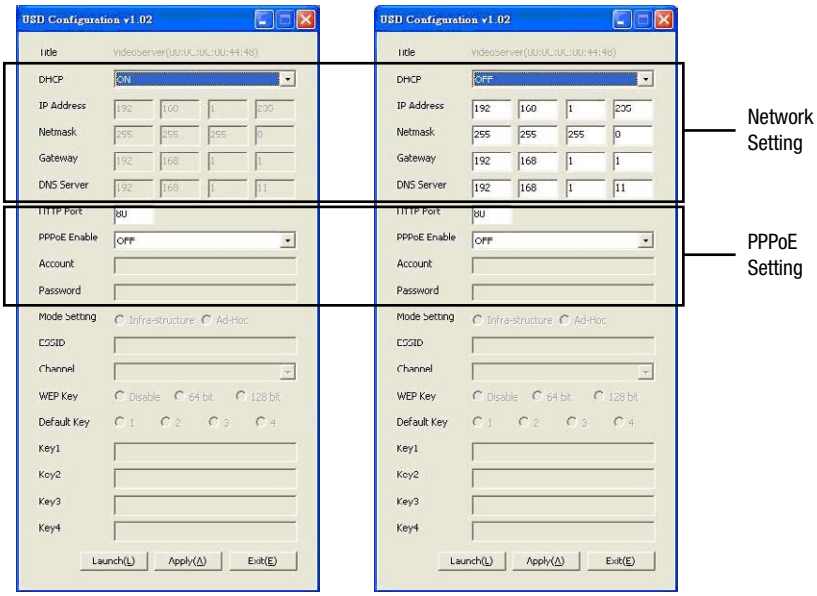
1. **Insert an SD card:** As a card reader

   Insert an SD card into the Video Server, then connect to the PC. You might transfer files between the SD card and the PC. Once you've connected your Video Server to your computer, the Windows system will detect the connection and ask you what you want to do with your SD card.

   In another words, if the user connects the Video Server with an SD card and the PC via the USB connector, the Video Server can be used as a normal card reader.

2. **As a configuring tool:**

   By connecting the Video Server with a PC via the USB connector, you can set the Network and PPPoE functions of the Video Server directly by your PC.



DHCP ON DHCP OFF

NOTE: You can click the "Launch" button to link to the home page of the Video Server.

WARNING: After changing the settings, please click the „Apply" button. All of the options will be effective after removing the USB connector.

3.5 PoE (Power over Ethernet)

These technologies will enable the development of new networked appliances, by providing power as well as data over existing Ethernet cables.

The Summary Comparison of PoE Standards (Table 1) is listed as follows.

Table 1. Summary Comparison of PoE Standards

STANDARD	SOURCE									LOAD		REMARKS
	Source Voltage	Ethernet RJ-45 connector pin number *								Load Voltage	DC Load Connector	
		1	2	3	4	5	6	7	8			
IEEE 802.3af using data pairs	48VDC, protected	RX, DC+	RX, DC+	TX, DC-	spare	spare	TX, DC-	spare	spare	(embedded)		Industry Standard for embedded PoE
IEEE 802.3af using spare pairs	48VDC, protected	RX	RX	TX	DC+	DC+	TX	DC-	DC-	(embedded)		Industry Standard for embedded PoE

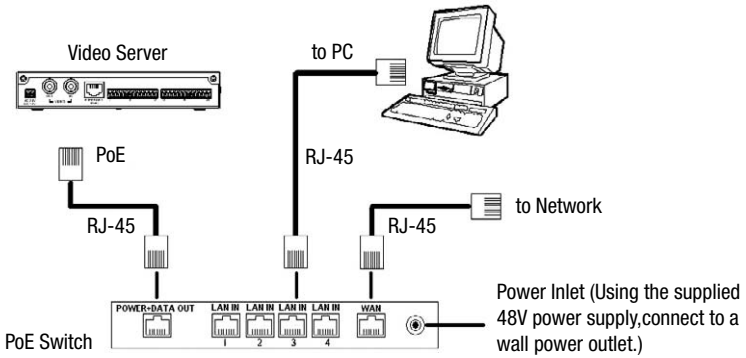
The compatible PoE Hubs (Table 2), which can be used with the unit, are shown in the tables below.

Table 2. Compatible PoE Switch

Manufacturer	Model	Port	Note
PLANET	FSP-804P	4 Port	PoE Switch
	POE-151	1 Port	PoE Switch
D-Link	DWL-P200	1 Port	PoE Switch

Connect to a PoE Switch

The Standard RJ-45 PIN configuration for connecting with a PoE Switch is shown below.



4. Installation

Please follow the instructions below to set up the system.

4.1 Updating System Software

If the system software of the Video Server needs to be upgraded, please take the following steps to safely process it.

IMPORTANT: Before carrying out the following procedures, please ensure the SD card is working and the file of the system firmware is intact

1. Format an SD card using the FAT format if it is unformatted.
2. Create a directory named „VSERVER" in the SD card if it does not exist.
3. Copy the file of UPDATE.BIN to the VSERVER-directory.
4. If the Video Server is running, please power it off first.
5. Insert the SD CARD into the Video Server.
6. Remove the Ethernet cable from the RJ-45 port and then power on the Video Server.
7. In 5 to 10 seconds, a message reading „UPDATE PROCESSING" will show up on the screen on a blue background; if not, please check out steps 1 to 6 carefully or else inform your technical support while ignoring the following steps.
8. DO NOT power off the Video Server while this update process is running until the message „UPDATE OK RESET PLEASE" appears on the screen; it might take 15 to 30 seconds to appear.
9. If the message „UPDATE NG RESET PLEASE" appears rather than „UPDATE OK RESET PLEASE", please write down the error messages shown on the screen and inform your technical support, while ignoring the following steps.
10. Power off the Video Server when this update process is finished, then remove the SD card from the Video Server.
11. Reconnect the Ethernet cable to the RJ-45 port if necessary.
12. Power ON the Video Server and it will work normally if the entire update procedure goes correctly.
13. Verify the version of the system software.

WARNING:

1. **Don't use the NTFS format in step 1.**
2. **Steps 1 to 3 have to be done on a PC.**
3. **Make sure the file of UPDATE.BIN is a correct one in step 3, or the VIDEO SERVER will not work normally after being updated.**
4. **If the power of the VIDEO SERVER is suddenly lost in step 8, please remove the SD card first and turn on the VIDEO SERVER next to test its operation. If the VIDEO SERVER remains working normally, please go back to step 4; otherwise, please inform your technical support.**
5. **In step 10, if the SD card is not removed and the Video Server does not get online as well, the updating process must be repeated again after rebooting the Video Server.**
6. **Make sure that the SD card is inserted in a correct position in step 5, or the Video Server will suffer permanent physical damage.**
7. **If the message „CSUM ERROR" appears in step 8, it implies a problem in the file of UPDATE.BIN.**
8. **Don't interrupt the process while the unit is updating itself; proceed with an SD card not including any system software of the unit, or else the unit will crash.**

4.2 Video Server SD Card Troubleshooting

1. Check if the SD card position is correct or not. Please refer to the manual for the related information.
2. After powering the Video Server on, correctly insert the SD card, and a little icon of „SD" will show up in the upper-right corner of the monitor screen. If not, it means the device detection has failed.
   Please contact your technical support and ignore the following steps.
3. If no cross sign appears beside the „SD" icon, please go on to the next step. If a cross sign appears, please check the following:
   a. Is it really an SD „Memory" Card ?
   b. Is this SD card formatted in the FAT16 format ?
   c. Connect the SD card with a PC and test to see whether the PC can read the data or not.
   d. Does this SD card still have the capacity for storing data ?
   e. Is the SD card set to write ?

   If all the answers are „yes" but the cross sign still persists, please contact your technical support and ignore the following steps.
4. Please make sure the function of „SD CARD ENABLE" is activated in the ALARM and SCHEDULE pages if no cross sign appears beside the „SD" icon on the screen.
5. After recording, read the data on the web page of „sdget.htm". If the data cannot be read through the network, please read it instead in a PC, check the data stored in the „VSERVER" directory and contact your technical support regardless of whether there is data or not.

WARNING:

1. **Performing this troubleshooting process may need a monitor, a PC, a card reader and some cables.**
2. **If the SD card is removed while storing or accessing data, the data will be lost.**
3. **If there is a cross sign beside the „SD" icon, it means the SD card has been inserted into the Video Server but cannot perform its writing function. Possible reasons are:**
   a. **It is not an SD memory card.**
   b. **The SD card is unformatted or formatted in a non-FAT16 or non-FAT12 format.**
   c. **The file system is damaged.**
   d. **The capacity of the SD card is full.**
   e. **The SD card is set to be read only.**
4. **Turn off the power before inserting the SD card. Otherwise the unit may shut down.**

5. Network Configuration

5.1 Cable Connections

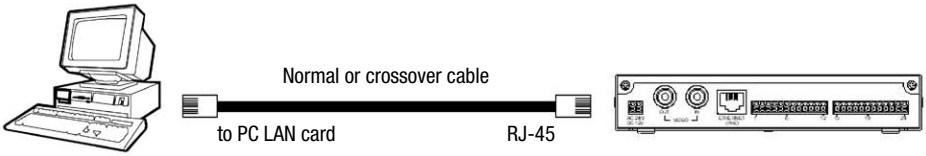
Please follow the instructions below to connect your Video Server to a computer or a network and to choose a proper RJ-45 cable configuration for connections.

Physical specification of RJ-45 cable for Ethernet

Wire Type	Cat. 5 or above
Connector Type	RJ-45
Max. Cable Length	100m
Hub Wiring Configuration	Straight through or Cross Over
PC Wiring Configuration	Straight through or Cross Over

5.1.1 Connect to a Computer

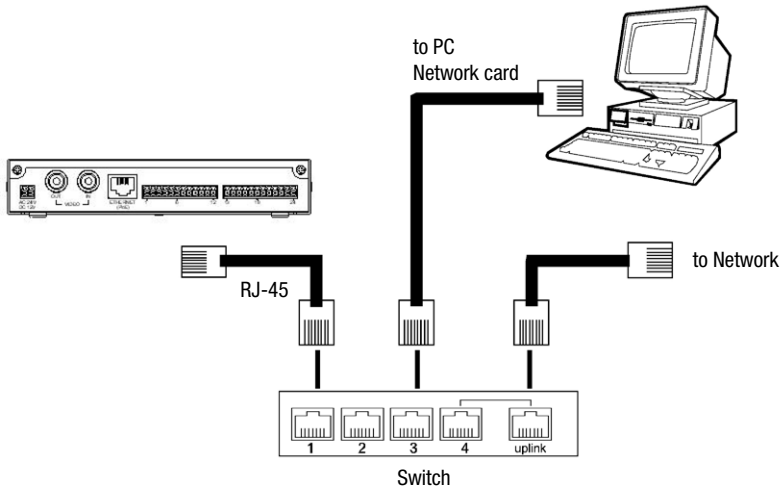
Use a cable to connect directly to a computer.



NOTE: When connecting the PC and the Video Server Board, the PC and the Video must be assigned IPs, which must be in the same class type as your network address.

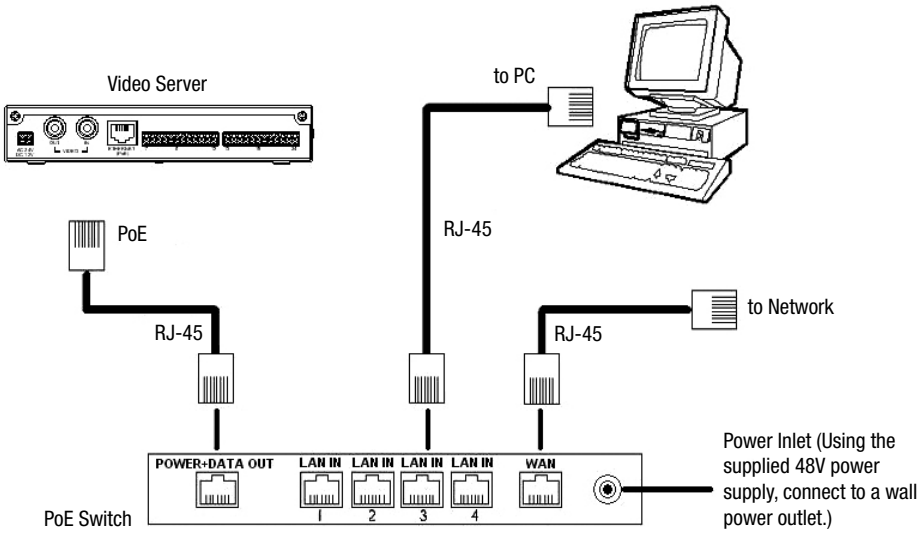
5.1.2 Connect to a LAN Switch (INTRANET)

The RJ-45 PIN configuration for connecting with a LAN Hub.



5.1.3 Connect to a PoE Switch

The Standard RJ-45 PIN configuration for connecting with a PoE Switch is shown below.

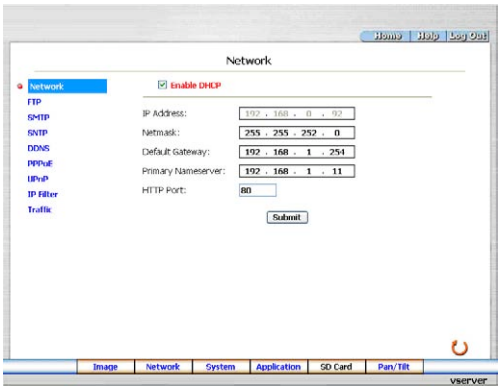


5.2 Configure your Video Server Network Settings

Upon connecting with the network hardware, you need to activate the network function and configure the proper network settings of the Video Server.

5.2.1 Enable DHCP Function

The user can use the USB function (refer to section 3.4) or the Internet Explorer (refer to section 6.1.3) to enable the DHCP function.



This function can only work if the LAN, which the unit is connected to, has a DHCP server. If the DHCP server is working, the Video Server will obtain an IP address automatically from the DHCP server. In that case, please skip section 5.2.2 (Set IP address) and follow section 5.3 (TCP/IP Communication Software).

5.2.2 Set IP Address

You need to set an IP address for the unit if the LAN unit isn't connected to a DHCP server.
Otherwise, please follow the instructions given below:

Set the **IP**, **MASK** and **GATEWAY**. The following is a sample setting.

IP:	192.168.1.X
MASK:	255.255.255.0
GATEWAY:	0.0.0.0

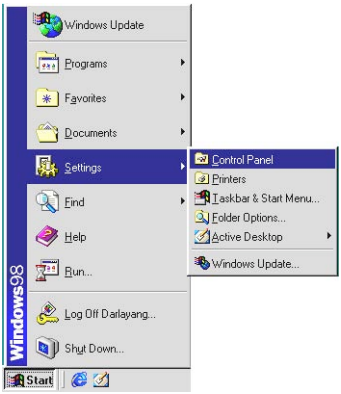
NOTE: When only one unit of the Video Server is connected to a computer or LAN, you can freely assign an IP address for the Video Server. For example, there is a range of Video Server IP addresses from 192.168.1.1 to 192.168.1.255. You can pick one for use from the range of the IP. It's not necessary to set MASK and GATEWAY; leave the settings as default.

When a Video Server is connected to a WAN, you must acquire a unique, permanent IP address and correctly configure the MASK and GATEWAY settings according to your network architecture. If you have any questions regarding those settings, please contact a qualified MIS professional or your ISP.

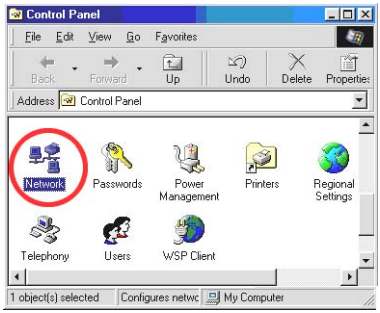
NOTE: When connecting to a network, each connected Video Server must be assigned a unique IP, which must be in the same class type as your network address. IP addresses are written as four sets of numbers separated by periods; for example, 192.168.1.1 Therefore, if the connected network is identified as Class C, for example, the first three sets of numbers of the Video Server IP address must be the same as the network address. If the connected network is identified as Class B, the first two sets of numbers of the Video Server IP address must be the same as the network address. If you have any questions regarding these settings, please contact a qualified MIS professional or your ISP.

5.3 TCP/IP Communication Software

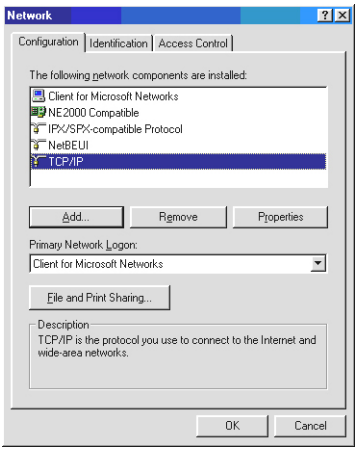
Follow the instructions below to install the TCP/IP communication program into your computer.
Click the **Start** menu from your computer, and point to the **Settings/Control panel.**



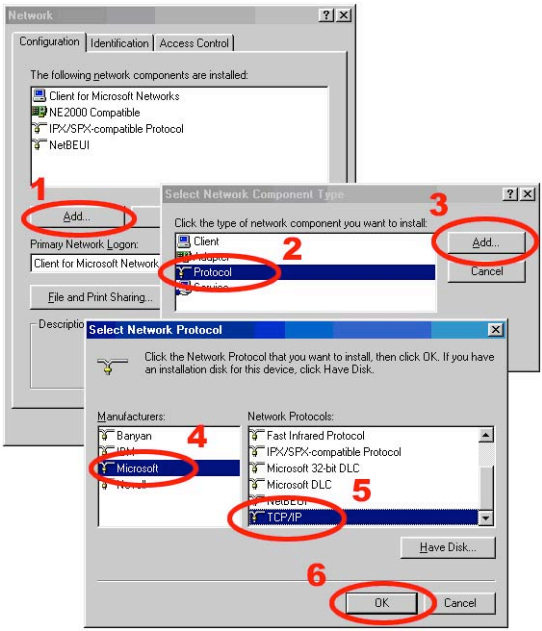
Double click the **Network** icon to enter the windows.



Click the **Configuration** tag, and check if the TCP/IP is included among the network components list. If the TCP/IP is included, please process section 5.5. If it is not included, please follow section 5.4 to install the TCP/IP.



5.4 TCP/IP Installation



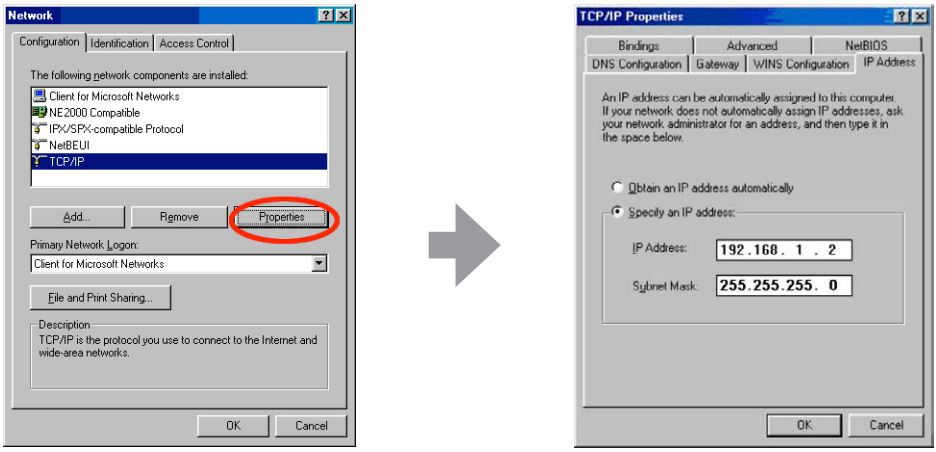
During the installation, you will be requested to insert the Windows CD-ROM. After installation, the PC may be restarted.

5.5 TCP/IP Configuration Setting

Click **Start –> Settings –> Control Panel –> Network**

Select **TCP/IP**, and then click **Properties**.

Before processing the Video Server installation in a WAN, please make sure the Internet connection works properly. If not, please contact your ISP provider.



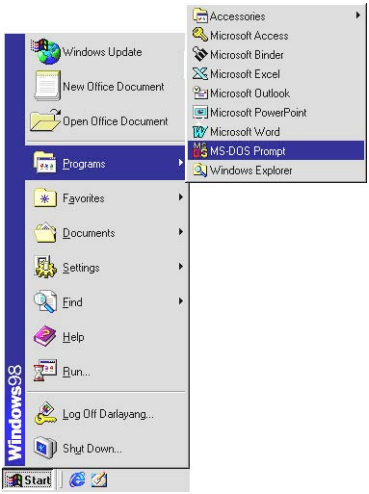
If you are using a DHCP server, please select **Obtain an IP address automatically**. Any assigned IP address for the connected Video Servers must be in the same class type as the server. If there is no DHCP server, please select **specify an IP address** and type in the IP address of your PC. This IP address must be different from other network IP devices but in the same class type.

NOTE: The IP address of a Video Server in a network must be unique to itself as opposed to those of the other chosen PCs, but in the same class type.

5.6 Connection Testing

With the previous settings, follow the instructions below to ensure whether you have established the connection successfully.

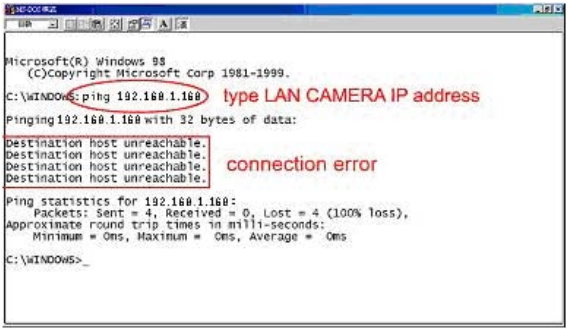
Click **Start –> Programs –> MS-DOS Prompt**



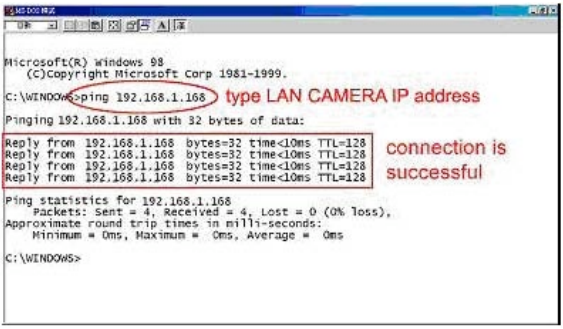
Type in **ping 192.168.1.168** then Enter. (See the sample screen below)

- This IP is the Video Server IP address that is assigned for the connected Video Server in step 2.

If you receive a response as in the sample screen below, the connection hasn't been successfully established. Please re-check all the hardware and software installation by repeating steps 1 to 5. If you still can't establish the connection after re-checking, please contact your dealer.


Microsoft(R) Windows 98
(C)Copyright Microsoft Corp 1981-1999.
C:\WINDOWS>ping 192.168.1.168
type LAN CAMERA IP address
Pinging 192.168.1.168 with 32 bytes of data:
Destination host unreachable.
Destination host unreachable.
Destination host unreachable.
Destination host unreachable.
connection error
Ping statistics for 192.168.1.168:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\WINDOWS>_

If you receive a response as in the sample screen below, you have successfully made the connection.


Microsoft(R) Windows 98
(C)Copyright Microsoft Corp 1981-1999.
C:\WINDOWS>ping 192.168.1.168
type LAN CAMERA IP address
Pinging 192.168.1.168 with 32 bytes of data:
Reply from 192.168.1.168 bytes=32 time<10ms TTL=128
Reply from 192.168.1.168 bytes=32 time<10ms TTL=128
Reply from 192.168.1.168 bytes=32 time<10ms TTL=128
Reply from 192.168.1.168 bytes=32 time<10ms TTL=128
connection is successful
Ping statistics for 192.168.1.168
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\WINDOWS>

6. Operating Instructions for Image Software and Network

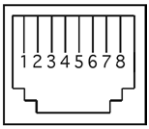
Two choices of software are available for linking with the Video Server: (1) the Microsoft Internet Explorer; and (2) the eneo GL-Manager, a network browser in a PC which provides the functions of monitoring remote zones or watching recorded data through the TCP/IP protocol.

The details are listed as follows.

RJ-45 PIN configuration for Ethernet

PIN NO.	PIN Assignment
1.	TX +
2.	TX -
3.	RX +
4.	Not Connected
5.	Not Connected
6.	RX -
7.	Not Connected
8.	Not Connected

RJ-45 socket



Physical specification for Ethernet

Wire Type	Cat. 5
Connector Type	RJ-45
Max. Cable Length	100m
Hub Wiring Configuration	Straight through or Cross Over
PC Wiring Configuration	Straight through or Cross Over

NOTE: If you use a laptop to connect the Video Server, please set the Power schemes to the „Home/office Desk" item to get the higher quality of surveillance.

1. **Open the Control Panel by clicking Start –> Control Panel.**
2. **Open the Display Properties by clicking Display –> Display Properties.**
3. **Click the Screen Saver item.**
4. **Click the „Power" button.**
5. **Select „Home/office Desk" under the Power schemes item.**

6.1 Microsoft Internet Explorer

6.1.1 Connecting the Video Server

1. Start up the Microsoft Internet Explorer, and then follow the steps below to connect the Video Server.
2. Click the URL block at the top of the window.
3. Enter the URL address of the Video Server into the URL block and press the **„Enter"** button to enter the home page.
4. Scroll to the bottom of the page, with its five icons, „Image", „Network", „System", „Application", „SD Card" and „Pan/Tilt". Whichever you click, the page headlined „Enter Network Password" will appear.
5. Type in the „User Name" and „Password" in the appropriate spaces.
6. Click the **„OK"** button to set your entries, and automatically exit the page.

NOTE: The default „User Name" and „Password" are admin and 9999 respectively.

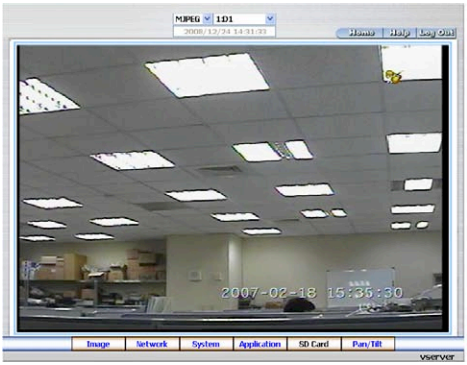
NOTE: The page headlined „Enter Network Password" is shown below. Please enter the user name and password of the Video Server when you see it. If either the user name or the password is incorrect, please check the input data and rectify it if and as necessary.

NOTE: Once authorized succesfully, it will not appear again until you close the window and reconnect it.

NOTE: The initial sequence of proceeding is to type in your IP address and click the „Enter" button to access the home page. If and when you revise or change data in the „SYSTEM USERS" page, the sequence will alter to initially show the „Enter Network Password" page.

Browsing images from the Video Server

The images from the Video Server will be displayed on the home page while going online with the Video Server. Some buttons of the home page are provided for further setting.



Homepage of MJPEG mode

Homepage of H.264 mode

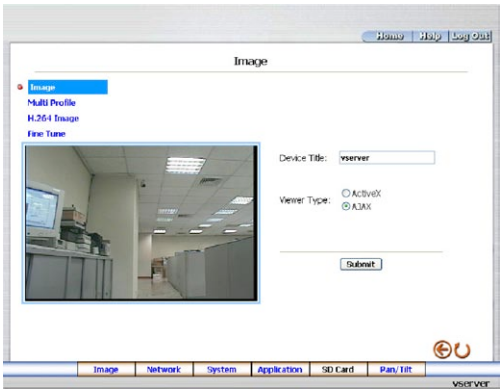
- Click the **Image** button to enter the image-setting page.
- Click the **Network** button to enter the network-setting page.
- Click the **System** button to enter the system-setting page.
- Click the **Application** button to enter the application-setting page.
- Click the **SD Card** button to open the FILELIST of the MEMORY CARD window, if the SD card is inserted.
- Click the **Pan/Tilt** button to change the Pan/Tilt/Zoom settings.
- Click the MJPEG 1:D1 to change the six pairs of resolution and quality which you already arranged in the „Multi Profile" setting page (MJPEG mode only).

  NOTE: The maximum video capture resolution of CIF for PAL is 352x288 pixels. The maximum video capture resolution of HALF D1 is 720 x 288 pixels. The maximum video capture resolution of D1 is 720 x 576 pixels.
- Click the 11/10/2005 14:31:37 button to change the time/date display mode.
- Click the button to play the live audio. Click once again to deactivate.
- **Digital zoom** function: Click the left mouse button on the video display area, and it will show the zoom-in images. Double click the left mouse button to see the maximum size. Click the right mouse button on the video display area, and it will show the zoom-out images. Double click the right mouse button to come back to the normal size.

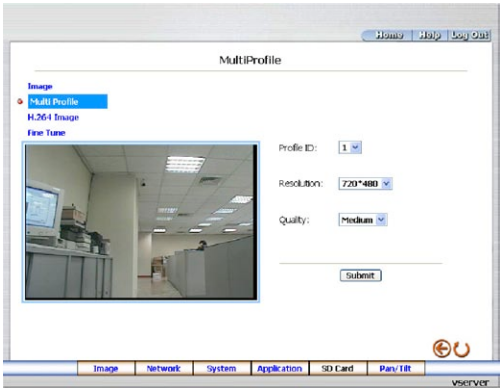
6.1.2 Change Image Setting

Please follow the steps below to change the image setting through the network if necessary.

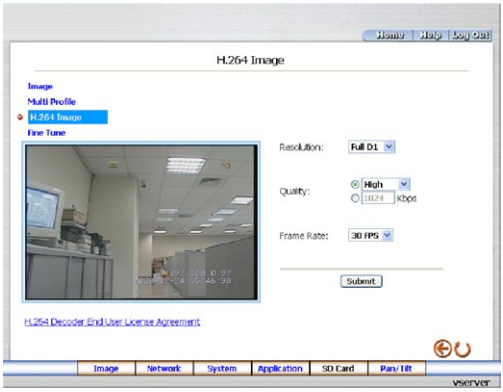
1. Click the **Image** button on the home page to enter the image-setting page.



2. Adjust the image setting including „Device Title" and „Viewer Type" if necessary.
3. Click the **Submit** button to submit the new image setting.
4. Click the **Multi Profile** button to enter the MultiProfile image-setting page. Select an ID (1-6) from the drop-down list then set its resolution and quality. Click the **Submit** button. Then you can exchange the pairs of resolution and quality directly in the Home page.

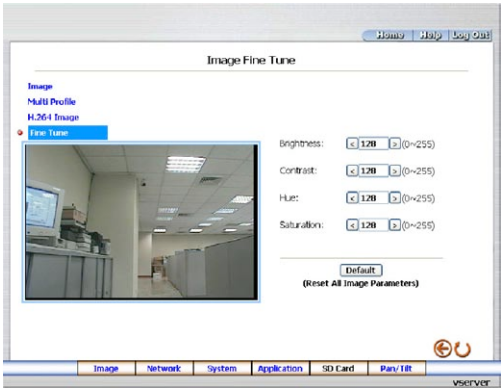


5. Click the **H.264 Image** button to enter the H.264 image-setting page. Adjust the image setting including „Resolution", „Quality" and „Frame Rate" if necessary.



6. Click the **Fine Tune** button to enter the Image Fine Tune page to set the details of the device including: „Brightness", „Contrast", "Hue" and „Saturation". Click the **Default** button to reset the channel image settings.

   NOTE: The revised image will appear immediately after any change in made.



7. Click the **Home** button to return to the home page while the new image setting acts on the images to effect the desired changes instantly. (If the setting has not been changed by the above steps, any (re)entry onto the home page will find images in their earlier or original setting.)

Description of function keys

Device Title: Type in the Video server title in the given space.

Resolution: **MJPEG mode** - Scroll to choose the image resolution from „352 * 240", "720 * 240" or "720 * 480" (NTSC); „352 * 288", „720 * 288„ or „720 * 576„ (PAL).

H.264 mode - Scroll to choose the image resolution from „Full D1","Half D1" or „CIF".

Quality: Scroll to choose the image quality out of a spectrum of qualities ranging from „highest", "high", „medium", and „low" to „lowest".

Brightness: Enter your desired quality of image brightness from a spectrum of 0 to 255.

Contrast: Enter your desired quality of image contrast from a spectrum of 0 to 255.

Hue: Enter your desired quality of image hue from a spectrum of 0 to 255.

Saturation: Type in the saturation level in the blank (0 to 255).

: Back to the last page.

: Reload the page.

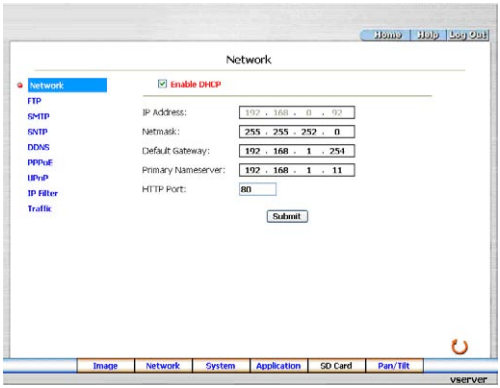
: Go to the next page.

6.1.3 Change the Network Setting

Please follow the steps below to change the network setting through the network if necessary.

- **Set the network options and IP address.**

1. Click the **Network** button in the home page to enter the Network page.



2. A warning message
Microsoft Internet Explorer
If you modify any IP address or HTTP Port of network setting. Please restart IE browser with new IP address or HTTP Port.
OK
will appear: If you modify any IP address or HTTP Port of network setting. Please restart the IE browser with the new IP address or HTTP Port. Click „**OK**" to continue.

3. The accessible networks here are the „FTP”, the „SMTP”, the „SNTP”, the „DDNS”, the „PPPoE” and the „IP Filter”.
4. Fill in the „IP Address”, „Netmask”, „Default gateway”, „Primary nameserver”, and „HTTP Port” if necessary.
5. Click the **Submit** button to submit the new network setting.
6. Click the **Home** button to return to the home page.

Description of function keys

IP Address: Enter the 4Byte IP Address in the appropriate blank space (the value in each box may be anywhere between 0 and 255). Every Video Server has to own an IP address to be identified on the network.

Netmask: Fill in the 4Byte Subnet Mask in the required blank spaces (usually any numbers between 0 and 255). It is used to identify the subnet where the Video Server is sited.

Default gateway: Type in the 4Byte Gateway in the relevant blank spaces (each unit value must be between 0 and 255).

Primary nameserver: Enter the 4Byte DNS Server Address in the blank spaces provided (each value unit must be between 0 and 255). The DNS Server is in charge of translating the Domain Name into the IP Address.

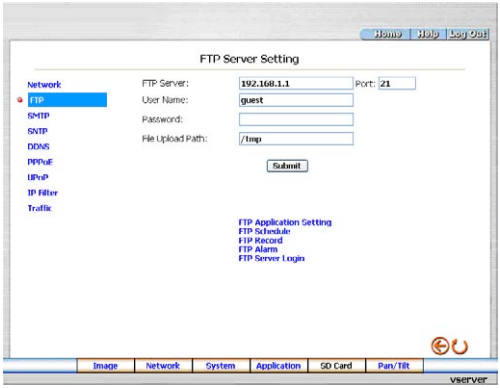
HTTP Port Number: Indicates the specific HTTP Port Number. The default is 80.

Submit: Click to submit the new network setting to the Video Server.

• Change the Network Setting - FTP

Please follow the steps below to change the FTP setting via the network if necessary to upload live recording data.

1. Click the **FTP** button at top left to enter the „FTP Server Setting” page.



2. Type in the „FTP Server” address, the „User Name”, and the „Password” of the FTP Server; and set the „File Upload Path” of the image files when necessary.
3. Click the **Submit** button to submit the new FTP setting of the recording.
4. Click the **Home** button to return to the home page.

Description of function keys

FTP IP Address: Enter the FTP server DOMAIN NAME in the appropriate blank spaces.

User Name: Fill in the FTP user name in the attached blank space (if the data is not provided, warning messages will show up).

Password: Type in the FTP password in the attached blank space (if the space is blank, warning messages will show up).

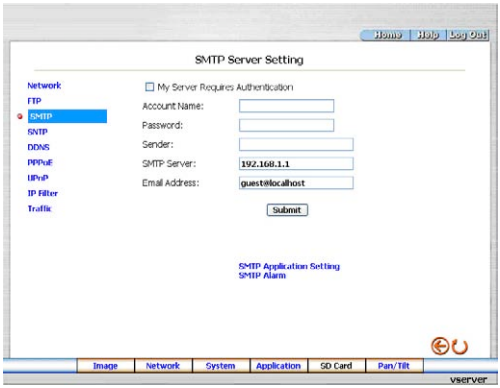
Upload Path: Enter the upload path while doing the FTP.

Submit: Click to submit the new FTP setting to the Video Server.

• Change the Network Setting - SMTP

Please follow the steps below to change the SMTP setting through the network if necessary.

1. Click the **SMTP** button at upper left above to enter the „SMTP Server Setting" page.



2. Fill in the Sender name, DOMAIN NAME of the SMTP server, and set the recipient's e-mail address if necessary.
3. Click the **Submit** button to submit the new SMTP setting.
4. Click the **Home** button to return to the home page.

Description of function keys

SMTP Server: Enter the SMTP server DOMAIN NAME in the given blank space.

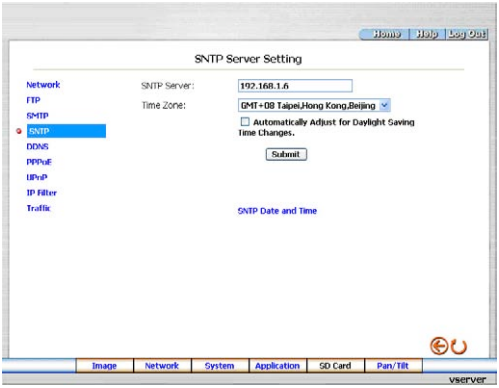
Email Address: The recipient's e-mail address

Submit: Click to submit the new SMTP setting to the Video Server.

- **Change the Network Setting - SNTP**

Please follow the steps below to change the SNTP setting through the network if necessary.

1. Click the **SNTP** button at upper left above to enter the „SNTP Server Setting" page.



2. Enter the IP Address of the SNTP server, and choose one of the time zones as and when necessary.
3. Click the **Submit** button to submit the new SNTP setting.
4. Click the **Home** button to return to the home page.

Description of function keys

SNTP Server: Enter the SNTP server DOMAIN NAME in the blank space provided.

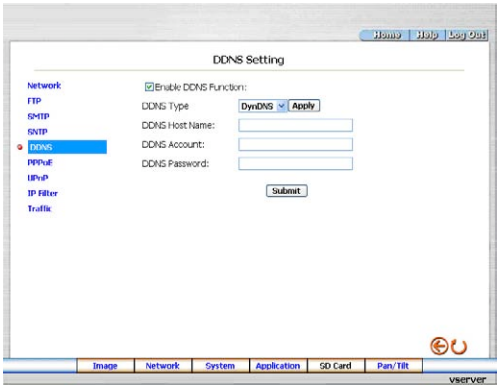
Time Zone: As we know, the globe is divided into various time zones. The user must enter his/her time zone. If this is not done, the time given by the unit may be incorrect.

Submit: Click to submit the new SNTP setting to the Video Server.

- **Change the Network Setting - DDNS**

The „Network" page has, on its upper left, the „DDNS" icon. Please follow the steps below to change the DDNS setting through the network if necessary.

1. Click the **DDNS** button at upper left above to enter the „DDNS SETTING" page.



2. Click the „Enable DDNS Function" to checkmark the attached box and activate the function.
3. Click „**DDNS Type**" to open the list of DDNS modes to choose from: „DynDNS" and „hn". Click the „**Apply**" button and connect their website automatically and visit it. Type in your dynamic IP Address and Email Address. If they are accepted by the website, you will get an Email containing your DDNS Account and DDNS Password in your Email box.
4. Type in the „DDNS Host Name", the „DDNS Account" and the „DDNS Password".
5. Click the **Submit** button to submit the new setting.
6. Click the **Home** button to return to the home page.

NOTE: Please refer to 6.1.8 PPPoE & DDNS section for more details.

Description of function keys

Enable DDNS Function: Checkmark to activate the function

DDSN Type: Click to open the list of two DDNS modes to choose from: „DynDNS" and „hn".
Click the „**Apply**" button and connect this website automatically and enter it. Type in your dynamic IP Address and Email Address. If they are accepted by the Website, you will get an Email containing your DDNS Account and DDNS Password in your Email box.

DDNS Host Name: Type in your host name in the attached space.

DDNS Account: Enter it in the given space.

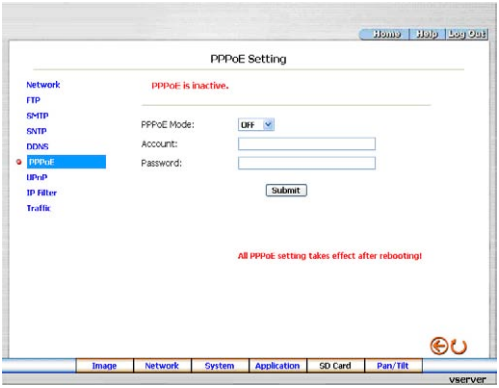
DDNS Password: Enter it in the required space).

Submit: Click to set.

- **Change the Network Setting - PPPoE**

The „Network" page has, on its upper left, the „PPPoE" icon. Please follow the steps below to change the PPPoE setting through the network if necessary.

1. Click the **PPPoE** button at upper left above to enter the „PPPoE Setting" page.



2. Click the „PPPoE mode" to activate the function.
3. Type in the PPPoE „Account" and the PPPoE „Password".
4. Click the **Submit** button to submit the new setting.
5. Click the **Home** button to return to the home page.

NOTE: Please refer to 6.1.8 PPPoE & DDNS section for more details.

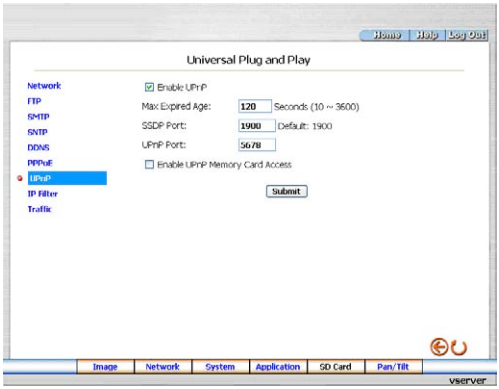
Description of function keys

PPPoE mode: Click your choices to enable the PPPoE function
Account: Enter it in the given space.
Password: Enter it in the required space.
Submit: Click to set.

- **Change the Network Setting - UPnP**

The „Network" page has, on its upper left, the „UPnP" icon. Please follow the steps below to change the UPnP setting through the network if necessary.

1. Click the **UPnP** button at upper left above to enter the „Universal Plug and Play" page.



2. Click „Enable UPnP" to checkmark the attached box and activate the function.
3. Type in the UPnP „Max Expired Age", the „SSDP Port" and the „UPnP Port".
4. Click „Enable UPnP Memory Card Access" to checkmark the attached box and activate the function.
5. Click the **Submit** button to submit the new setting.
6. Click the **Home** button to return to the home page.

Description of function keys

Max Expired Age: Enter it in the given space from a range of 10~3600.

SSDP Port: SSDP stands for Simple Service Discovery Protocol. SSDP searches for upstream Internet gateways using UDP port 1900.

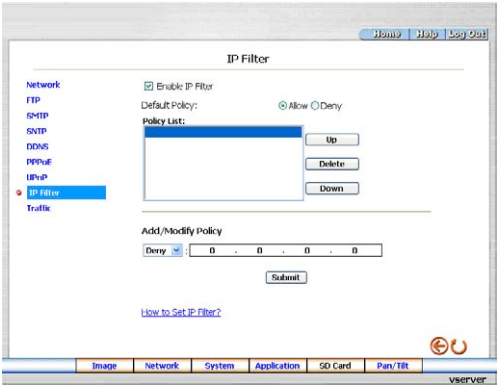
UPnP Port: Type in the UPnP Port in the attached space.

Submit: Click to set.

- **Change the Network Setting - IP Filter**

The „Network" page has, on its upper left, the „IP Filter" icon. Please follow the steps below to change the IP Filter setting through the network if necessary.

1. Click the **IP Filter** button at upper left above to enter the „Network Setting" page.



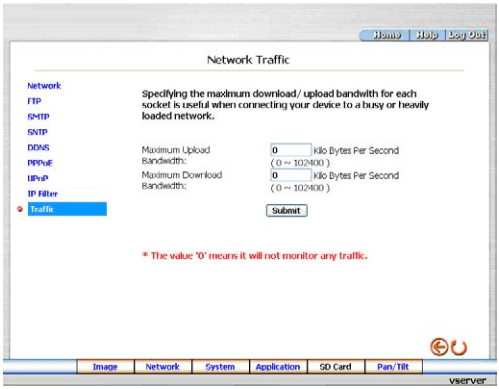
2. Click „Enable IP Filter" to checkmark the attached box and activate the function.
3. Select the Default policy.
4. Set the Allow/Deny IP Filter policy and enter its IP address.
5. After setting the policies, they will be shown on the **Policy List**. The user can use the „**Up**" or „**Down**" to select a policy and use the „**Delete**" button to erase it.
6. Click the **Submit** button to submit the new setting.
7. Click the **Home** button to return to the home page.

NOTE: The settings of the IP Filter must be correct or you may not able to operate the device regularly. In case of the wrong setting of the IP Filter and you can't access the device normally, please press the „*Default*" button on the rear panel of the Video Server for back to the factory default setting.

- **Change the Network Setting - Network Traffic**

The „Network" page has, on its upper left, the „Traffic" icon. Please follow the steps below to change the UPnP setting through the network if necessary.

1. Click the **Traffic** button at upper left above to enter the „Network Traffic" page.



2. Type in the „Maximum Upload Bandwidth" and the „Maximum Download Bandwidth".
3. Click the **Submit** button to submit the new setting.
4. Click the **Home** button to return to the home page.

Description of function keys

Maximum Upload Bandwidth: Enter it in the given space from a range of 0 to 102400.

Maximum Download Bandwidth: Enter it in the required space from a range of 0 to 102400.

Submit: Click to set.

6.1.4 Change the System Setting

Please follow the steps below to change the date and time of the system setting through the network if necessary.

- **Set the Date and Time of the System**

1. Click the **System** button in the home page to enter the „Date and Time" page (default).

2. Choose one of the three modes shown on the page to set the Date and Time of the system.
   The three modes are „Set Manually", „Synchronize with Computer Time", and „Synchronize with SNTP Server".
3. Click the **Submit** button to submit the new Date and Time setting.
4. Click the **Home** button to return to the home page.

Description of function keys

The Local Time: Shows the current date and time of the Video Server.

Set Manually: Manually sets the date and time of the Video Server.

Synchronize with Computer Time: Synchronizes with the linking computer.

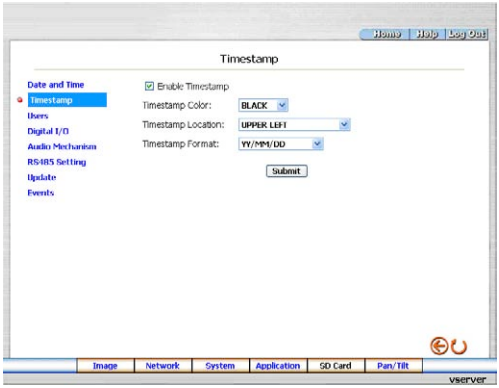
Synchronize with SNTP Server: Synchronizes with the SNTP server. In this mode, two choices of adjusting are provided: doing it manually or setting the frequency to enable the system to do it automatically.

Submit: Click to submit the new setting to the Video Server.

- **Change the System Setting - Timestamp**

Please follow the steps below to change/add the timestamp through the network if necessary.

1. Click the **Timestamp** button on the left side of the „System" page to enter the „Timestamp" page.



2. Click „**Enable Timestamp**" to checkmark the attached box and activate the function
3. Add or modify any timestamp's data if necessary.
4. Enter the „Timestamp Color" you have chosen.
5. Enter the „Timestamp Location" you have chosen.
6. Enter the „Timestamp Format" you have chosen.
7. Click the **Submit** button to submit the new user's setting.
8. Click the **Home** button to return to the home page.

Description of function keys

Enable Timestamp: Checkmark to activate the function.

Timestamp Color: Click to open the list of eight color modes to choose from: „BLACK", „WHITE", „RED", „ORANGE", „YELLOW", „GREEN", „BLUE", and „PURPLE".

Timestamp Location: Click to open the list of four location modes to choose from: „UPPER LEFT", „UPPER RIGHT", „BOTTOM LEFT", and „BOTTOM RIGHT", "ANALOG UPPER LEFT", „ANALOG UPPER RIGHT", „ANALOG BOTTOM LEFT" and „ANALOG BOTTOM RIGHT".

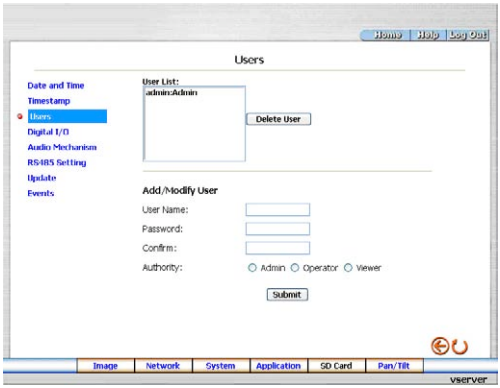
Timestamp Format: Click to open the list of six format modes to choose from: „YY/MM/DD", „MM/DD/YY", „DD/MM/YY", „YY/MM/DD TITLE", „MM/DD/YY TITLE", and „DD/MM/YY TITLE".

Submit: Click to set.

- **Change the System Setting - Users**

Please follow the steps below to change/add the users' authority through the network if necessary.

1. Click the **Users** button on the left side of the „System" page to enter the „Users" page.



2. Add, modify or delete any user's data if and as necessary.
3. Click the **Submit** button to submit the new user's setting.
4. Click the **Home** button to return to the home page.

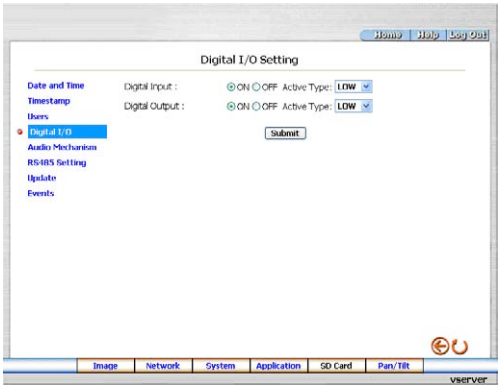
Description of function keys

User List: The list shows the registered user(s) and the corresponding authority.
Delete: Deletes the user selected.
Name: Enter the user's name, which will be added or modified
Password: Enter the new password of the user's name above.
Confirm: Type in the password again for verification.
Authority: Choose an authority option of the user's name from: Admin, Operator, and Viewer.
Submit: Click to submit the new setting to the Video Server.

- **Change the System Setting - Digital I/O**

Please follow the steps below to change the Digital I/O through the network if necessary.

1. Click the **Digital I/O** button on the left side of the „System" page to enter the „Digital I/O Setting" page.



2. Mark „Digital Input" „ON" or „OFF". Click your choices to enable.
3. Select from the drop-down list to modify the Active Type of the Digital Input or Digital Output.
4. Click the **Submit** button to submit the new user's setting.
5. Click the **Home** button to return to the home page.

Description of function keys

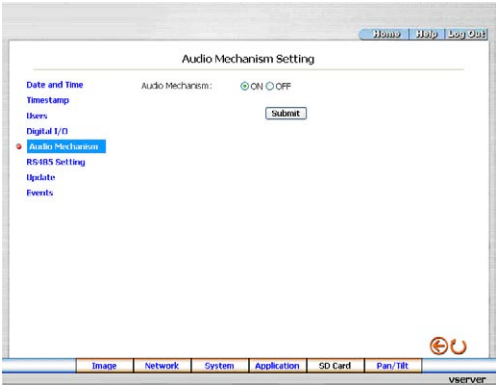
Digital Input: Select „ON" or „OFF" to use the GPIO connector, or shut it down.
Digital Output: Use the GPIO connector.

NOTE: For using the Digital Output function, you have to set the driven type of the alarm device. The Video Server provides two choices between High or Low. When setting the alarm device input to high level or activating the rising edge, please set the Digital Output function to High, otherwise, please set to Low.

- **Change the System Setting - Audio Mechanism**

Please follow the steps below to change the Audio Mechanism through the network if necessary.

1. Click the **Audio Mechanism** button on the left side of the „System" page to enter the „Audio Mechanism Setting" page.



2. Mark „Audio Mechanism" „ON" or „OFF".
3. Click the **Submit** button to submit the new user's setting.
4. Click the **Home** button to return to the home page.

   NOTE: This setting is for turning the audio mechanism of the Videor Server on/off automatically.

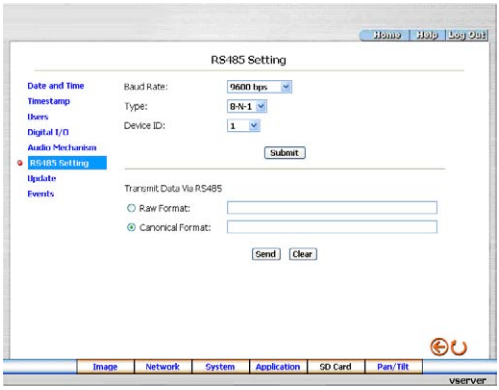
Description of function keys

Audio Mechanism: Select „ON" or „OFF" to activate or deactivate the function.

- **Change the System Setting – RS485 Setting**

Please follow the steps below to change the RS485 Setting through the network if necessary.

Click the **RS485 Setting** button on the left side of the „System" page to enter the „RS485 Setting" page.



Description of function keys

Baud rate: Eight different speeds can be used: 2400 baud per second, 4800 baud, 9600 baud, 19200 baud, 28800 baud, 38400 baud, 57600 baud and 115200 baud.

Type: Choose one of the types.

Device ID: You have the option of using an ID code (any number between **1** and **255**).

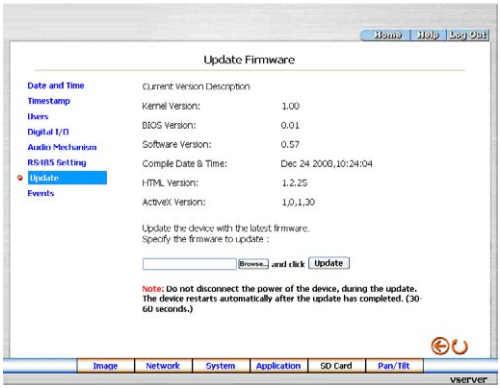
Raw format: Set to transmit the ASCII codes.

Canonical format: Set to transmit the character string.

- **Change the System Setting - Update Firmware**

Please follow the steps below to change the Audio Mechanism through the network if necessary.

1. Click the **Update Firmware** button on the left side of the „Date and Time" page to enter the „Update Firmware" page.



2. Click the „**Browse…**" button to select the UPDATE.BIN file which was copied into your computer.
3. Click the „**Update**" button.
4. DO NOT power off the Video Server while this update process is running.

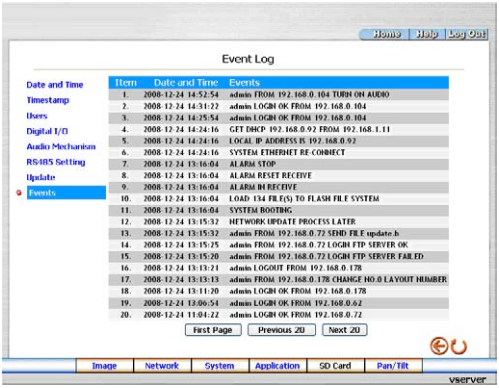
NOTE: Don't interrupt the process while the unit is updating itself.

NOTE: Please make sure that the UPDATE.BIN file is fit in with the model of the unit.
Updating with the wrong UPDATE.BIN file may cause any physical damage to the device.

- **View the Event Logs**

Please follow the steps below to view events through the network if and as necessary.

1. Click the **Events** button on the upper left above to enter the „Event Log" page.


Home
Help
Log Out
Event Log
Date and Time
Timestamp
Users
Digital I/O
Audio Mechanism
RS485 Setting
Update
Events
Item Date and Time Events
1. 2008-12-24 14:52:54 admin FROM 192.168.0.104 TURN ON AUDIO
2. 2008-12-24 14:31:22 admin LOGIN OK FROM 192.168.0.104
3. 2008-12-24 14:25:54 admin LOGIN OK FROM 192.168.0.104
4. 2008-12-24 14:24:16 GET DHCP 192.168.0.92 FROM 192.168.1.11
5. 2008-12-24 14:24:16 LOCAL IP ADDRESS IS: 192.168.0.92
6. 2008-12-24 14:24:16 SYSTEM ETHERNET RE CONNECT
7. 2008-12-24 13:16:04 ALARM STOP
8. 2008-12-24 13:16:04 ALARM RESET RECEIVE
9. 2008-12-24 13:16:04 ALARM IN RECEIVE
10. 2008-12-24 13:16:04 LOAD 134 FILE(S) TO FLASH FILE SYSTEM
11. 2008-12-24 13:16:04 SYSTEM BOOTING
12. 2008-12-24 13:15:32 NETWORK UPDATE PROCESS LATER
13. 2008-12-24 13:15:32 admin FROM 192.168.0.72 SEND FILE update.b
14. 2008-12-24 13:15:25 admin FROM 192.168.0.72 LOGIN FTP SERVER OK
15. 2008-12-24 13:15:20 admin FROM 192.168.0.72 LOGIN FTP SERVER FAILED
16. 2008-12-24 13:13:21 admin LOGOUT FROM 192.168.0.178
17. 2008-12-24 13:13:13 admin FROM 192.168.0.178 CHANGE HD.0 LAYOUT NUMBER
18. 2008-12-24 13:11:20 admin LOGIN OK FROM 192.168.0.178
19. 2008-12-24 13:06:54 admin LOGIN OK FROM 192.168.0.62
20. 2008-12-24 11:04:22 admin LOGIN OK FROM 192.168.0.72
First Page
Previous 20
Next 20
Image
Network
System
Application
SD Card
Pan/Tilt
vserver

2. Choose one of the three buttons shown on the page to view an event when necessary. The three buttons are titled „First Page", „Previous 20", and „Next 20".

Description of function keys

First Page: Displays the first page

Previous 20: Displays the previous 20 pages

Next 20: Displays the next 20 pages

6.1.5 Change the Application Setting

Please follow the steps below to change the application setting through the network if necessary.

- **Change the Application Setting - FTP Application Setting**

Please follow the steps below to change the FTP setting via the network if and as necessary to upload recording data live.

1. Click the **Application** button on the home page to enter the „FTP Application Setting" page (default).

2. Enter the „Upload Rate" you have chosen.
3. Click **Submit** after each of the above entries for their setting.
4. Click the **Home** button to return to the home page.

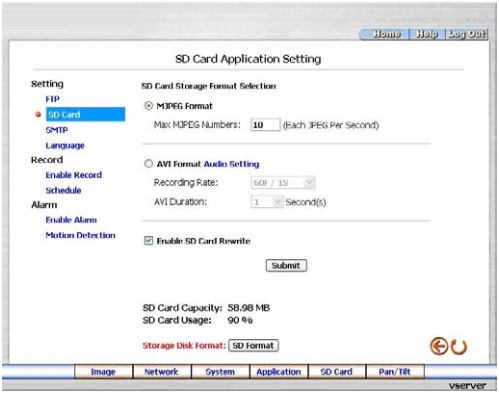
Description of function keys

Upload Rates: Sets the upload speed rate.

- **Change the Application Setting - SD Card Application Setting**

Please follow the steps below to change the SD CARD setting via the network if necessary to upload recording data live.

1. Click the **SD card** button on the top left to enter the „SD-Card Application Setting" page.



2. You have an option as to which SD - card storage format to use, the MJPEG or the AVI. Click your selected format and click **Submit** to set it.
3. If it's MJPEG you want, fill in the „Max MJPEG Numbers" entry.
4. If AVI is your choice, enter its recording rate and duration in seconds, and click **Submit** for their setting.

Description of function keys

MJPEG Format: One image per file

Max MJPEG Numbers: Sets the number of file sequences you can save per second.

AVI Format audio setting: Unlike a single - image file, this option offers a selected section of a video record.

Recording Rate: Sets your chosen frame rate of frames per second.

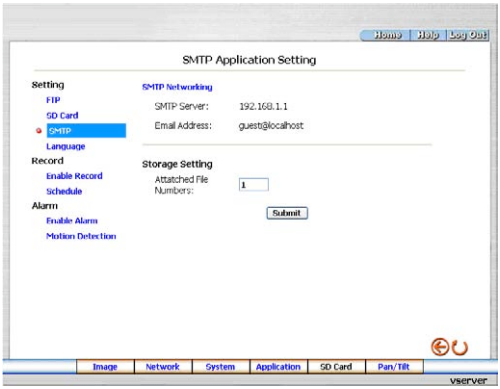
AVI Duration: Predetermines the length of each video file in terms of seconds.

Enable SD Card Rewrite: Tick to activate the SD card rewrite function.

- **Change the Application Setting - SMTP Application Setting**

Please follow the steps below to change the SMTP setting via the network if necessary.

1. Click the **SMTP** button on the left side to enter the „SMTP Application Setting" page.



2. Enter the attached file number as and when necessary. The maximum number which can be used is 8.
3. Click the **Submit** button to submit the new SMTP setting of the recording.
4. Click the **Home** button to return to the home page.

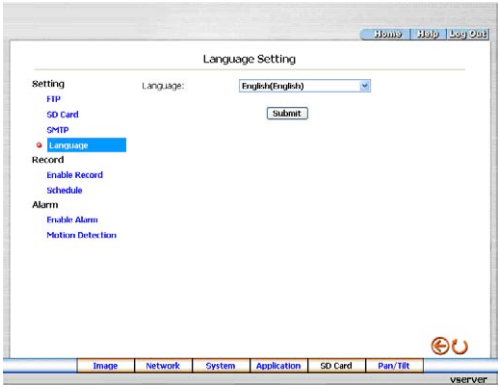
Description of function keys

File numbers: Sets the quantity of images per Email.

- **Change the Application Setting - Language Setting**

Please follow the steps below to change the Language setting via the network if necessary.

1. Click the **Language** button on the left side to enter the „Language Setting" page.

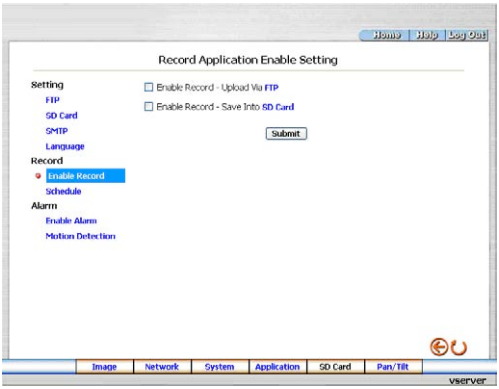


2. You have an option as to which language to use. The default is „English"
3. Click your selected language and click „**Submit**" to set it.

- **Change the Application Setting -Record Application Enable Setting**

Please follow the steps below to change the setting via the network if necessary.

1. Click the **Enable Record** button on the left side of the record to enter the „Record Application Enable Setting" page.



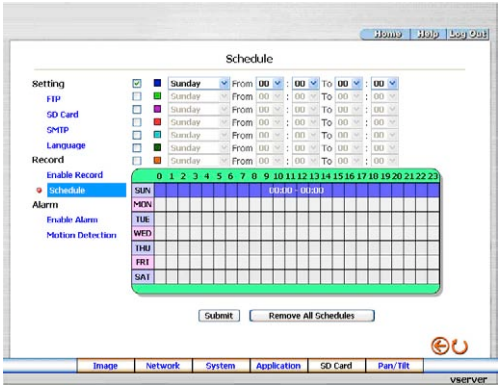
2. Click „Enable Record - UPLOAD Via FTP” to checkmark the attached box and activate the function.
3. Click „Enable Record - Save Into SD card” to checkmark the attached box and activate the function.
4. Click the **Submit** button to submit the new setting of the recording.
5. Click the **Home** button to return to the home page.

Description of function keys

Enable Record - Upload Via FTP: Activates or deactivates the recording to the FTP server.
Enable Record - Save Into SD Card: Activates or deactivates the recording to the SD card.

• Change the Application Setting - Record - Schedule

1. Click the **Schedule** button on the left side of the record to enter the „SCHEDULE” page.



2. Check/uncheck any/all of the first seven boxes set vertically in the upper half of the „Record-Schedule” page to enable/disable the programmed recording function, and vary the setting of the targeted item while it is enabled.
3. Click the **Submit** button to submit the new schedule setting.
4. Click the **Remove All Schedules** button to clear out all the data of the schedule setting.

Description of function keys

Schedule: Check / uncheck the first seven boxes in a vertical row on the left to enable/disable the programmed scheduled recording function if necessary. Vary any of the schedules of the recording setting if necessary (please refer to the above description).

Chart: Schedule list

Submit: Click to submit the new setting to the Video Server.

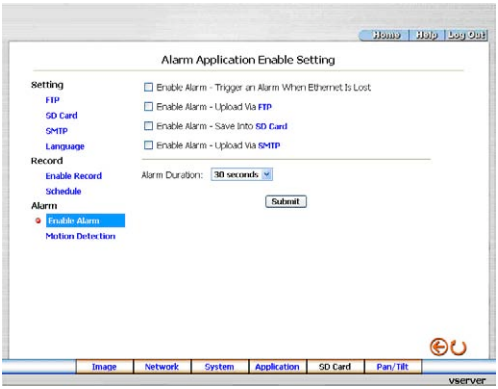
Remove All Schedules: Click to clear out all the data of the schedule setting.

NOTE: Please make sure that the start and stop time you want to assign are not the same or the device won't start and stop recording according to the programmed schedule.

- **Change the Application Setting - Alarm Application Enable Setting**

Please follow the steps below to change the setting via the network if necessary.

1. Click the **Enable Alarm** button on the left side of the record to enter the „Alarm Application Enable Setting" page.



2. Check / uncheck the trigger types of „Enable Alarm – Upload Via FTP".
3. Check / uncheck the trigger types of „Enable Alarm – Save Into SD Card".
4. Check / uncheck the trigger types of „Enable Alarm – Upload Via SMTP".
5. Enter the „Alarm Duration" you have chosen.
6. Click the **Submit** button to submit the new setting of the recording.
7. Click the **Home** button to return to the home page.

Description of function keys

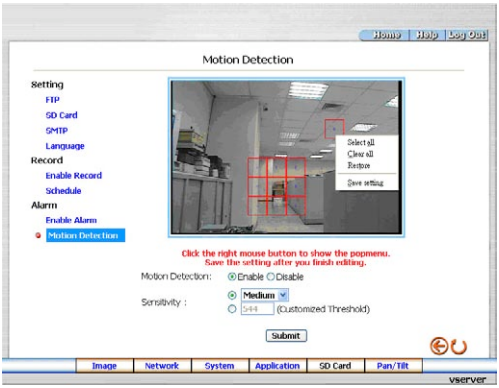
Enable Alarm - Upload via FTP: The alarm recording will be upload to the FTP when triggered.
Enable Alarm - Save Into SD Card: The alarm recording will be saved to the SD card when triggered.
Enable Alarm - Upload via SMTP: The alarm recording will be upload to the SMTP when triggered.
Alarm Duration: Predetermines the length of the alarm. This setting will apply in the four channels.

- **Change the Application Setting - Alarm - Motion Detection**

Please follow the steps below to enable changes in the motion detection function of the alarm through the network if necessary.

Set the motion detection:

1. Click the **Motion Detection** button on the left side of the Alarm to enter the „Alarm - Motion Detection" page.



2. Click and drag the left mouse button to across a targeted zone to draw a red rectangle on the image (coordinates provided below).

   NOTE: You can set more than one targeted zone depending on your requirement.

3. Click the right mouse button to see the popup-menu. After setting the target zone, please click „Save setting".
4. Enables / disables the motion detection function.
5. Set up the sensitivity.
6. Click the **Submit** button to submit the new setting of the recording.
7. Click the **Home** button to return to the home page.

NOTE: Press and hold the „Ctrl" key on your keyboard and use the left mouse key to draw a blue rectangle on the image to disable the motion detection area.

You also can click the left mouse key directly on a red check to disable it.

Description of function keys

The targeted zone: Click and drag the mouse across the targeted zone to draw a red rectangle on the image.

Detection Range: The red rectangle's coordinates

Save: Click to save the motion detection range.

Motion Detection: This option enables / disables the motion detection function.

Sensitivity Level: Selects any one of the given options for the setup signal level or just type in the value of Customized Threshold.

Submit: Click to submit the new setting to the Video Server.

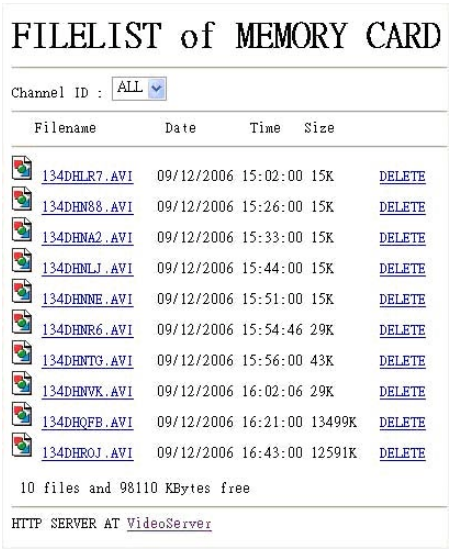
6.1.6 View the SD Card filrs

Please follow the steps below to change the SD Card setting through the network if necessary.

- **Change the SD Card Setting - FILELIST of MEMORY CARD**

Please follow the steps below to change the setting via the network if necessary.

1. Click the „SD Card" button at the bottom of the home page to enter the page containing the „FILELIST of MEMORY CARD". The page comes in two modes, the JPEG and the AVI (please refer to the „SD card Application Setting" page).


FILELIST of MEMORY CARD
Channel ID : ALL
Filename Date Time Size
134DHLR7.AVI 09/12/2006 15:02:00 15K DELETE
134DHN88.AVI 09/12/2006 15:26:00 15K DELETE
134DHNA2.AVI 09/12/2006 15:33:00 15K DELETE
134DHNLJ.AVI 09/12/2006 15:44:00 15K DELETE
134DHNNE.AVI 09/12/2006 15:51:00 15K DELETE
134DHNR6.AVI 09/12/2006 15:54:46 29K DELETE
134DHNTG.AVI 09/12/2006 15:56:00 43K DELETE
134DHNVK.AVI 09/12/2006 16:02:06 29K DELETE
134DHQFB.AVI 09/12/2006 16:21:00 13499K DELETE
134DHROJ.AVI 09/12/2006 16:43:00 12591K DELETE
10 files and 98110 KBytes free
HTTP SERVER AT VideoServer

FILELIST of MEMORY CARD
Channel ID : ALL
Filename Date Time Size
14E9HIAZ.TAG 09/21/2006 16:16:10 269 DELETE
14E9M8AZ.TAG 09/21/2006 17:36:10 269 DELETE
24E9IVAZ.TAG 09/21/2006 16:40:10 269 DELETE
24E9KNIZ.TAG 09/21/2006 17:10:10 269 DELETE
24E9MC2Z.TAG 09/21/2006 17:38:10 269 DELETE
34E9L2QZ.TAG 09/21/2006 17:16:10 269 DELETE
44E9LC6Z.TAG 09/21/2006 17:21:10 269 DELETE
7 files and 97392 KBytes free
HTTP SERVER AT VideoServer

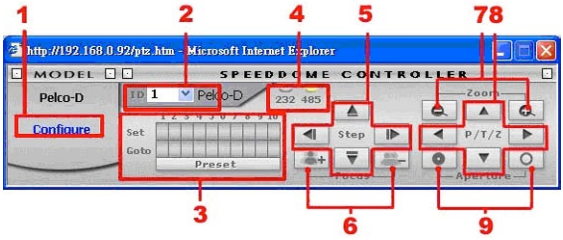
2. Select the desired channel.
3. Click the desired file to display the images therein.
4. Every file can be deleted by clicking the attached „DELETE" hyperlink.

NOTE: You can't directly click the hyperlink of the file in the „FILELIST of MEMORY CARD" page with the right button of the mouse focus then click „SAVE" to save the file.

CAUTION: If you wish to save the SD CARD files from a Video Server to your computer, you can enter the JPEG column in the „FILELIST of MEMORY CARD" page to click in and enter the particular files in the column. When you click in, the images concerned will appear. Move your mouse focus within the image area and click the right button of the mouse. A table of item entries will show up. Click „Save" and select the path by which to save your files.

6.1.7 Control the Speed Dome

Click the **Pan/Tilt** button on the home page to open the Speed Dome Controller.



1. Click „**Configure**" to enter to the RS485 setting page (please refer to **Change the System Setting – RS485 Setting**). Select a Speed Dome device ID from the drop-down list on the Speed Dome Controller. The Controller will display the corresponding ID.
2. Each of the ten buttons under 'Set' is connected with a specific position and angle of either panning or tilting of the camera. Click each button to activate its particular position and angle. Press the button under 'Preset' to turn the camera angle by angle in the set positions. Each of the ten buttons designated 'Go to' can be clicked to view the particular corresponding angle of the position in which it is set.
3. Select the connecting port. The RS-485 communication ports function as connectors when two or more units are serially connected to an external control device.
4. Upon the buttons being clicked, a camera will move one short step only in any of the four designated directions.
5. Click the buttons to control the Focus setting on the Speed Dome Controller. Click „**+**" button to focus far and click the „**–**" button to focus near.
6. Click the buttons to control the Zoom setting on the Speed Dome Controller. Click „**+**" button to zoom in and click the „**–**" button to zoom out.
7. Upon the buttons being clicked, a camera will turn all the way, without stopping, in one of the four designated directions.
8. Click the buttons to control the Aperture setting on the Speed Dome Controller.

6.1.8 PPPoE & DDNS

Using the PPPoE

1. Install the XDSL software (obtained from your ISP dealer) in your PC.
2. Search your Video Server's IP address: you can use your Network Viewer's Scan IP program, or just connect the Video Server and the Video monitor. The monitor screen will show the IP address on its right side.
3. Installing an IP address in your PC or notebook.

   Desktop –> Move the mouse focus to the Network neighborhood and click the right key of the mouse –> Choose the properties –> Choose your local connection –> Choose the properties and select the configuration –> Select the TCP / IP –> Choose the properties –> Type in the IP address in a four-part formula, for example „192. 168. 1.101" (the first three parts must be identical to the above numbers, only the last part can be changed to your own number, which must never exceed 255) –> Click the mask and the mask input, namely „255. 255. 255. 0" (a fixed formula) –> Click „OK" –> Click „OK".
4. Desktop –> Choose IE browser –> Type in the Video Server IP address in the URL (check step 2 above) –> Enter –> Video Server images will appear.

PPPoE Settings

1. Enter the Video Server home page –> Choose the network –> Type in „User Name: admin" and „Password: 9999" –> Click „OK'.
2. Choose PPPoE –> PPPoE mode: Select „ON" –> Type in „Account" –> Type in „Password" –> Submit –> Unplug the power connection.
3. Plug in the Video Server and it will receive an IP address from the ISP dealer (this IP address is dynamic - every time you unplug and plug in again you'll get a new IP address).

Test: Go to the Internet.

1. Set your PC to enter the Internet.
2. Desktop –> IE browser –> Type in the Video Server IP address (the same address as in the PPPoE settings and step 3 above) –> You can see the Video Server images.

DDNS settings

1. Check your Video Server's IP address (Scan IP software or monitor) –> open your IE browser –> Use the address to connect to the Video Server or view the images –> Choose the network –> Type in „User name : admin" and „Password : 9999" –> Click „OK" .
2. Choose the „DDNS" –> Click „Enable DDNS" –> Enter the „DDNS host name", for example „abc123. homeip.net" –> Type in „DDNS Account", for example „abc123" –> Enter the „DNS Password", for example „7777" –> Submit –> The settings are now complete –> Close the IE browser.
3. Open the IE browser again –> Type in the Website address you just applied for, such as „abc123.homeip.net" –> You can look at your Video Server images right away. The procedure is complete.

NOTE: These settings are only for your ADSL Dynamic IP configuration. If your configuration is fixed (true IP), you don't need to proceed with the PPPoE and DDNS settings. The DDNS is just for your convenience.

7. Advanced Operation

Question 1:

How to set up the motion detection area and its sensitivity? How to record into the SD card for 30 seconds when the motion has been activated and use the Microsoft Internet Explorer to view the recorded files ?

- **Set up the motion detection**
  1. Click the **Application** button in the home page.
  2. Click the **Motion detection** button on the left side of the page to enter the „MOTION DETECTION" page.
  3. Click and drag the mouse left button across a targeted zone to draw a red rectangle on the image. You can also draw the other targeted zones as you wish.
  4. Please **Enable** the motion detection function.
  5. Set up the sensitivity level from: Lowest, Low, Medium and High to Highest.
  6. Click the **Submit** button to submit the setting.

- **Recording the images into an SD card while the motion detection function is working**
  1. Click the **Application** button in the home page.
  2. Click the **Enable** button below the ALARM item on the left side of the page to enter the „ALARM APPLICATION ENABLE SETTING" page.
  3. Tick on **„Enable ALARM-SAVE into SD Card"** to activate it.
  4. Click the **Submit** button to submit the setting.

  NOTE: Please remember to insert the SD card into the built-in SD slot of the unit first.

- **Set the recording time (the AVI duration) of the SD card**
  1. Click the **Application** button in the home page into the „SD-Card APPLICATION SETTING" page.
  2. Choose the **AVI Duration** from the drop-down list. If you want to record the file into the SD card for 30 seconds, please choose „30 seconds".
  3. Click the **Submit** button to submit the setting.

- **Use IE to view the recorded files**
  1. Click the **SD Card** button in the home page to enter the page containing the „FILELIST of MEMORY CARD".
  2. Click the filename which you want to view.
  3. It will ask you to enter the username and password.
  4. If you didn't set the other player before, the AVI file will be played by the Windows Media Player.

Question 2:

How to use the DynDNS to connect the Video Server by using its Sub Hostname via the Intranet ?

- **Set the DDNS function**
  1. Click the **Network** button in the home page.
  2. Click the **DDNS** button on the left side of the page to enter the „DDNS SETTING" page.
  3. Tick on the „Enable DDNS Function" to activate it.
  4. Choose one of the DDNS Types from the drop-down list.

     If you didn't register for a DDNS before, please choose one of the DDNS Type then press „Apply" button to its registering homepage and register as a member.
  5. Enter the DDNS Host Name, DDNS Account and DDNS Password which you created in the www.dyndns.com website.
  6. Click the **Submit** button to submit the setting.

  NOTE: Please refer to the APPENDIX 2 for more details.

- **Set the PPPoE function**
  1. Click the **Network** button in the home page.
  2. Click the **PPPoE** button on the left side of the page to enter the „PPPoE SETTING" page.
  3. Choose „ON" from the „PPPoE mode" list to activate it.
  4. Enter the Account and the Password which are provided from your ISP.
  5. Click the **Submit** button to submit the setting.

  NOTE: Please refer to section 5.1.8 for more details.

- **Use the Sub Hostname to view the Video Server**
  1. Click the URL block at the top of the PC screen.
  2. Type in the DDNS Host Name of the Video Server into the URL block and press the **„Enter"** button to enter the login page.
  3. Enter the user name and fill in the password.
  4. Click the **„OK"** button and enter the home page of the Video Server.

Question 3:

How to set the scheduled record on from, say, 6:00 PM to 7:00 PM with the recording rate of 1F/8S and upload the recorded file to the FTP server ?

- **Set the scheduled recording time**
  1. Click the **Application** button in the home page.
  2. Click the **Schedule** button on the left side of the page to enter the „SCHEDULE" page.
  3. Select one of the schedules and set the recording time period.
  4. Tick the schedule on to activate it.

     For example, if you want to set the schedule record on from 6:00 PM to 7:00 PM, please choose „FROM 18:00 to 19:00" on the drop-down list. Then tick on the schedule which you just set.
  5. Click the **Submit** button to submit the setting.

- **Upload the recorded file via the FTP**
  1. Click the **Application** button in the home page.
  2. Click the **Enable** button on the left side of the page to enter the „Record Application Enable Setting" page.
  3. Tick on „Enable RECORD - UPLOAD via FTP".
  4. Click the **Submit** button to submit the setting.

- **Set the upload rate**
  1. Click the **Application** button.
  2. Click the **FTP** button on the left side of the page to enter the „FTP Application Setting" page.
  3. Set the last item „Upload Rate" at the bottom of the page to the rate you want.
     If you want to record at the rate of 1F/8S, please choose „1F/8S" in the drop-down list.

Question 4:
How to add or modify the users and their authorities of using the Video Server ?

- **Entering the setting page**
  1. Click the **System** button in the home page.
  2. Click the **Users** button on the left side of the page to enter the „System - Users" page.

- **Add a new user**
  1. Please enter the user name, the password, the confirmed password and choose the authority.
     There are three different levels of authorities, namely Admin, Operator and Viewer.
     Admin: The user who accesses with the admin name and password has the full power to even change the settings of the Video Server.
     Operator: The suggested choice for normal use.
     Viewer: The user who accesses with just the viewer name and password has only a limited power to view.
  2. Click the **Submit** button to submit the new user's setting.

- **Modify the user**
  1. Click the user name you want to modify on the **User List**.
  2. Enter the password, the confirmed password and choose the authority.
  3. Click the **Submit** button to submit the new setting.

- **Delete a user**
  1. Click the user name you want to modify on the **User List**.
  2. Click the **Delete** button.

8. Specifications

Type	**GLS-2301H**
Art. No.	**92551**
Series	eneo GL
System	PAL/NTSC
System requirements	Processor: Pentium IV, Core2 Duo; 2.8GHz; 512MB RAM; Microsoft Windows XP, Vista
Compression standard	MJPEG, H.264
Ethernet interface	10Base-T, 100Base-TX, RJ-45
Network protocols	TCP/IP, IPv4, UDP, FTP, PPPoE, ICMP, ARP, DHCP, SMTP, DDNS, DNS, RTSP, IP Filtering
Power over Ethernet	IEEE 802.3af
Configuration	Via WebBrowser, Built-in WebServer
Picture adjustments	Image quality: 5 levels
Playback	via CMS Viewer Software
Resolution max.	720 x 576
Video resolution	720x576 (D1), 720x288 (2CIF), 352x288 (CIF), 176x144 (QCIF)
Image transm. rate max.	25 i./sec.
Video inputs (amount)	1
Video inputs	1Vp-p, (C)VBS, 75ohms
Video output	1 Vp-p, (C)VBS, 75 ohms
Audio support	yes
Audio standards	u-law
Motion Detection Function	92 zones
Audio input	1x line-in
Audio output	1x Line output
Audio sampling rate	8kHz
Alarm inputs	6x TTL
Alarm processing	Alarm triggered by build-in motion detection, external alarm. Alarm notify to ANNP, e-mail, FTP, SD card, alarm out
System Integration	Comprehensive development SDK kit, including HTTP-API, Active-X control, customized Web page tool
Alarm output	6x TTL
Alarm reset input	TTL input
PTZ Support	yes
Activity detection	yes
Internal storage	yes

Digital storage media	6 MB RAM (Pre alarm memory, MJPEG), SD card
Access	16 Users simultaneous support
Serial interfaces	RS-485
Software upgrade	SD card / HTTP (Web browser) / FTP / USB
Text display	Date and time
Menu languages	German, English, Italian, French, Polish, Dutch, Spanish, Schwedish, Finnish, Hungarian, Czech, Portuguese
Password protection	yes, Multi level (administrators and users), IP filtering, HTTPS
Supply voltage	12VDC, 24VAC, PoE
Power consumption	3.0watts
Housing	–
Colour	Pantone 400U
Temperature range (Operation)	0 ~+50°C
Dimensions (HxWxD)	32 x 176 x 50mm
19" Rack mountable	no
Weight	390g
Parts supplied	PSU 100~240V/12VDC with power cord, USB cable, Viewer/installation CD, Manuals
Management Software Support	Aimetis - Symphony, Zelaris IP, NetAvis, GL-Manager, Milestone XProtect Corporate
Certificates	CE

Optional Accessories

Art. No.	Type	Description
76001	**ZELARIS V08**	Digital Video Network Crosslink, 8 Inputs, not extentable, USB 2.0 Dongle
76002	**ZELARIS V16**	Digital Video Network Crosslink, 16 Inputs, not extentable, USB 2.0 Dongle
76051	**ZELARIS V04**	Video Management Software for standalone systems, basic version, 4 cameras
76053	**ZELARIS S04**	Server/Client Video Management Software, basic version, 4 camera server license
76056	**ZELARIS_IP S04E**	Software Extension for Zelaris_IP S04 for further 4 cameras, max. 64 cameras
76058	**ZELARIS_IP HL-E**	Extension for Control Room Client for further up to 1024 channels max.
76047	**ZELARIS_IP HL-B**	Control Room Client Software, basic version, up to max. 1024 channels

9. Function of Client PC

System requirement	Windows 2000, XP or above
Browser	IE 6.x
Live Monitor	Max. 16 Split, Real Time REC / Capture / Audio / Live Event / Full Screen
Playback Viewer	Playback, Time / live event Search / Export (JPEG / AVI)
Settings	Device / System / Camera management / web page

APPENDIX 1

Register as a DDNS Member

The DDNS (dynamic domain name system) is a function which is provided by an American company. Please refer to www.dyndns.com. This chapter provides the user with the basic instructions on how to register a free DDNS service.

Registering for a DDNS

Enter the URL www.dyndns.com. In the upper right-hand corner of the main page, where there is an item, „Create Account", as shown in Figure 1.

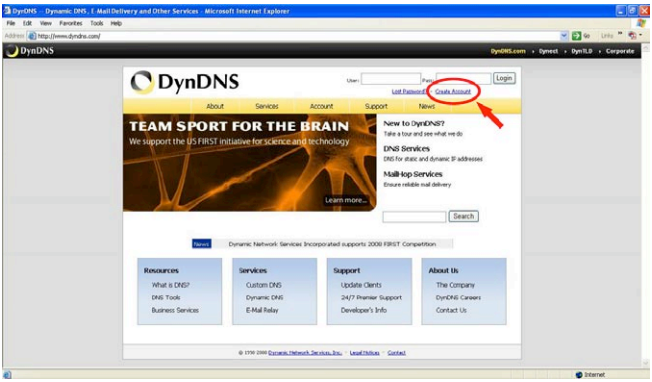


Figure 1

Create an account

After clicking „Create Account", you will enter the Create Account page. Please complete the form at the bottom of the page to create your account. You will receive an e-mail containing instructions to activate your account. If you do not follow the directions within 48 hours, you will need to recreate your account.

Set up the DDNS

After creating the account successfully, please enter your user name and password in the upper right-hand corner of the main page to login, as shown in Figure 2.

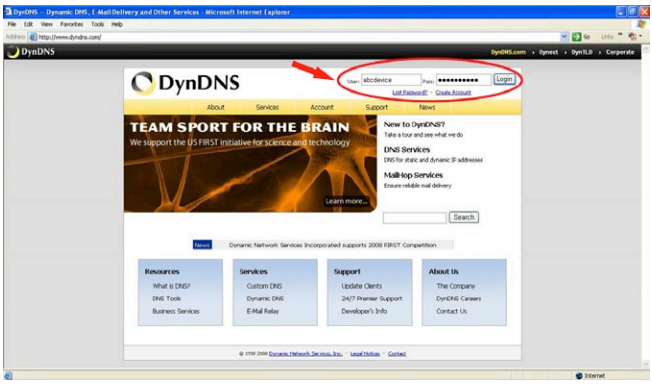


Figure 2

After you login successfully, a text will appear saying „My Services", as shown in Figure 3.

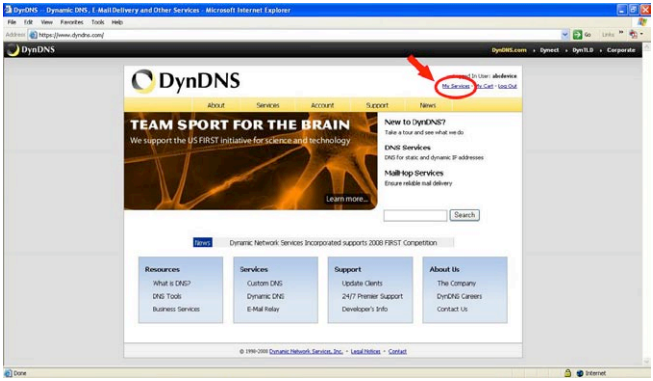


Figure 3

Click „My Services" to enter the service page. Please click the „Add Host Service" item which is below the „My Hosts" item, as shown in Figure 4.

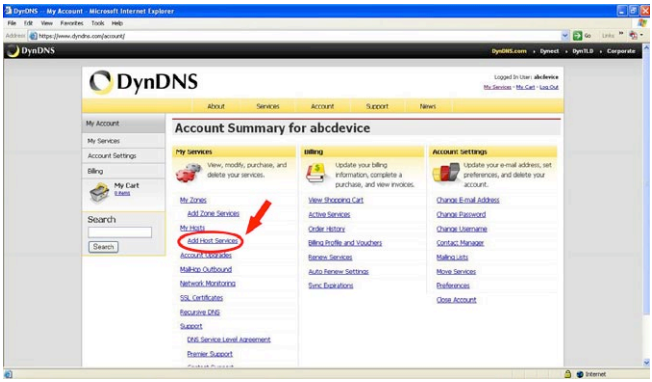


Figure 4

Click „Add Host Service", and its service items will appear. The Add Dynamic DNS Host item helps to add a new DDNS. Each member may have only one free account, and one free account can have only five DDNS.

Click Add Dynamic DNS Host to enter the DDNS setting page as shown in Figure 5.

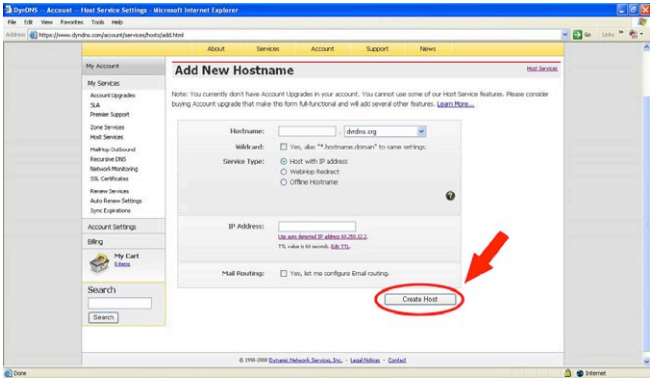


Figure 5

All we have to set in this page is the „Hostname" item. The user can choose a Sub Hostname as s/he likes from the right-hand side of the Hostname's drop-down list.

NOTE: You don't have to set the „IP Address" in the same format as the device's IP Address. It will renew the IP Address automatically.

After finishing the setting, please press the „Create Host" button as shown in Figure 6.

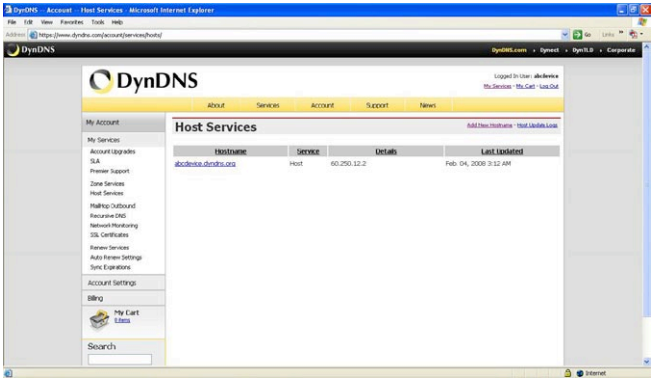


Figure 6

APPENDIX 2

PoE Installation Method

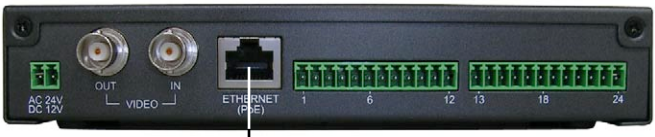
WARNING:

Please follow the steps in this instruction carefully. Connecting these adapters incorrectly may result in damage to your network devices.

1. Provided accessories:

	IP Video Server
	Ethernet (CAT5 UTP/Straight through) cable
	Power over Ethernet Injector (input rating: 48VDC)
	AC adapter (input: 100-240VAC; output: 48VDC)
	Power cord

2. IP Video Server



POWER+DATA IN: Connect a CAT 5 RJ-45 straight- through cable from the POWER+DATA OUT port on the Power over Ethernet Injector.

3. Power over Ethernet Injector

POWER+DATA OUT: Provides the data and power to the IP Video Server. Connect this port to the POWER+DATA IN port on the IP Video Server.

POWER IN: Using the supplied 48V power supply, connect to a wall power outlet.

LAN IN: Connect a CAT 5 RJ-45 straight-through cable to your computer

4. Connecting the IP Video Server: please take the following steps:

Step 1:

Insert one end of a Cat 5 Ethernet RJ-45 cable into the „LIN IN" port of the Power over Ethernet Injector.
Connect the other end of the cable to your network switch or PC.

Step 2:

Plug one end of the Power adapter into the „POWER IN" port of the Power over Ethernet Injector and the other end into your electrical outlet.

The installed connection looks the same as in Figure 1.

Figure 1

Step 3:

Connect another Cat 5 Ethernet RJ-45 cable from the Power over Ethernet Injector „POWER+DATA OUT" port to the „POWER+DATA IN" port of the IP Video Server.

The installed connection looks the same as in Figure 2 and Figure 3.

Figure 2

Figure 3

Step 4:

The „Act indicator" of the IP Video Server should light up.

APPENDIX 3

FAQ

1. Can the SD Card be removed during recording ?

A: No, it cannot be removed until the recording comes to a single point. The POWER LED flashing light signals the SD card is operating. The green light indicates the unit is activating. The red light warns the SD card cannot be removed. If the SD card is withdrawn in this mode, the card will break.

2. I've set the function of „Motion Detection" but it doesn't seem to work.

A: Check if „Motion range" and „Sensitivity" have been set before activating the function.

3. My AVI files recorded in the SD Card cannot be displayed. What can I do to display the files ?

A: Please visit „http://www.morgan-multimedia.com/" to download „Morgan M-JPEG codec" and install it, and then check the selection of the „IJP Core".

4. How to turn on/off the OSD (on screen display) on/off on the Video Server ?

A: Visit the homepage - tailpage.htm of the device, and select „ON" or „OFF" in the OSD column.

Example: suppose the IP address of the device is 192.168.1.168

Type in http://192.168.1.168/tailpage.htm (a registration is needed) and select „ON" or „OFF" in the OSD column.

WARNING: Please write down the IP address of the device before you turn off the OSD.

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V. 1.1

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